

MASUDA et al., Appl'n No. 09/925,500
Amdt. dated 27 September 2004
Reply to Office Action of 27 May 2004

566.40490X00/HT 169301
Page 11

REMARKS

This Amendment is responsive to the Office Action identified above, and is responsive in any other manner indicated below.

ACKNOWLEDGMENT OF PRIORITY

A claim of foreign priority under 35 USC §119 and certified copy of the Japanese priority application was filed in the present application on 13 December 2001. Accordingly, Applicant respectfully requests written acknowledgment of the completion of requirements under 37 CFR §1.55 and 35 USC §119.

PENDING CLAIMS

Claims 1-11 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is present interested. At entry of this paper, Claims 2 and 5-14 will be pending for further consideration and examination in the application.

ALL REJECTIONS UNDER 35 USC §§102 AND 103 - TRAVERSED

All 35 USC rejections (*i.e.*, the 35 USC §102 rejection of Claims 1, 2 and 5-11 as being anticipated by Kondo (US 6,650,686 B1); the §102 rejection of Claim 7 as being anticipated by Norimatsu (US 6,344,821 B1); the 35 USC §103 rejection of Claim 3 as being unpatentable over Kondo in view of Zhou et al. (US 6,539,009 B1);

MASUDA *et al.*, Appl'n No. 09/925,500
Amdt. dated 27 September 2004
Reply to Office Action of 27 May 2004

566.40490X00/HT 169301
Page 12

and the §103 rejection of Claim 4 as being unpatentable over Kondo in view of Ishikawa *et al.* (US 6,697,662 B1)) are respectfully traversed. All such rejections have been rendered obsolete by the present clarifying amendments to Applicant's claims, and accordingly, traversal arguments are not appropriate at this time. However, Applicant respectfully submits the following to preclude renewal of any such rejections against Applicant's clarified claims.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated herein by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

Unrelated to any prior art rejection, Claims 1, 3 and 4 now have been canceled (without prejudice or disclaimer), thus rendering rejection of such claims and any discussion of the Zhou and Ishikawa references obsolete at this time. Patentability of remaining ones of the rejected claims are supported as follows.

In order to properly support a §102 anticipatory-type rejection, any applied art reference must disclose each and every limitation of any rejected claim. In order to properly support a §103 obviousness-type rejection, the reference not only must suggest the claimed features, but also must contain the motivation for modifying the art to arrive at an approximation of the claimed features. However, the applied art does not adequately support either a §102 anticipatory-type rejection or a §103 obviousness-type rejection because, at minimum, such applied art does not disclose (or suggest) the following discussed limitations of Applicant's claims.

MASUDA et al., Appl'n No. 09/925,500
Amdt. dated 27 September 2004
Reply to Office Action of 27 May 2004

566.40490X00/HT 169301
Page 13

With Applicant's disclosed and claimed invention, there is a reading of a correction value stored in a storage unit based on information on the hand over source cell (source sector) and the hand over destination candidate cell (candidate sector) contained in information, where the correction value is used to correct a reference value of the received signal level necessary for controlling the hand over. That is, there is a correcting of the reference value with the correction value, and subsequently, and controlling of the hand over based on the corrected reference value and the received signal level of the perch channel signal contained in the information from the mobile station. None of the applied references (taken singly or in combination) disclose or suggest such arrangements.

Further, added Claims 12-14 specify that the correction value is a tabulated correction value stored in a correction value table having a plurality of correction values arranged according to hand over source cells (source sectors) and hand over destination candidate cells (candidate sectors). None of the applied references (taken singly or in combination) disclose or suggest such correction value table having tabulated correction values arranged as indicated.

In addition to the foregoing, the following additional remarks from Applicant's foreign representative also are submitted in support of traversal of the rejection and patentability of Applicant's claims.

An important object of the present invention is to perform more reliable hand over even when a discrepancy occurs between the range of the cell or sector covered by the base station and the range in which the base station in question can actually communicate.

MASUDA et al., Appl'n No. 09/925,500
Amdt. dated 27 September 2004
Reply to Office Action of 27 May 2004

566.40490X00/HT 169301
Page 14

In order to achieve the above mentioned object, the base station controller of the present invention comprises a storage unit which stores a correction value used to correct a reference value of a received signal level necessary to control hand over. A control unit reads out the correction value stored in the storage unit, corrects the reference value with the correction value, and controls the hand over based on the corrected reference value and the received signal level of a perch channel signal associated with the hand over source cell (or source sector) and the hand over destination candidate cell (or candidate sector) transmitted from the mobile station through a plurality of base stations.

With regard to the differences between the present invention and the applied references, the object of Kondo is to quickly demodulate signals in a mobile station or handover destination site without performing a path search in a wide range (Column 1, lines 7-12).

In contrast, one of the important features of the present invention is to perform reliable hand over even when there occurs a discrepancy between the range of the cell or sector covered by the base station and the range in which the base station in question can actually communicate. Thus, the object of the present invention is different from that of Kondo.

Furthermore, in Kondo, when the mobile station performs handover, reception timing difference is accumulated. In hand over between the sites, the reception timing of a base station in the handover source site is corrected with the accumulated timing difference to obtain reception timing of a base station in the handover destination site (Column 4, lines 22-59, Fig. 3 of Kondo). Additionally, the

MASUDA et al., Appl'n No. 09/925,500
Amdt. dated 27 September 2004
Reply to Office Action of 27 May 2004

566.40490X00/HT 169301
Page 15

reception timing of Kondo means "reception timing" of the spectrum code used in the spread spectrum communication system.

In contrast, in the present invention, the correction value stored in the storage unit means a correction value used to correct the reference value of the reception signal level necessary to control hand over, and therefore it is different from the "reception timing" of Kondo. The present invention uses the correction value stored in the storage unit to correct the reference value, and controls the hand over based on the corrected reference value and the reception signal level of a perch channel signal associated with the handover source cell (or source sector) and hand over destination candidate cell (destination cell). Accordingly, the present invention has a different structure from Kondo.

The present invention can achieve an advantageous effect that a more reliable hand over is performed even when the range of cells or sector is different from the actual communication range. Such effect cannot be obtained based on the invention of Kondo.

With regard to Norimatsu, an object of that reference is to provide a simplified inter-base station synchronizing method between base stations which can reduce search time and suspend unnecessary signals at handover occasions (Column 1, lines 9-4 and Column 2, lines 12-16).

In contrast, an important object of the present invention is to achieve a more reliable hand over even when there occurs a discrepancy between the range of the cell or sector and the range of actual communication. Thus, the object of the present invention is different from Norimitsu.

MASUDA et al., Appl'n No. 09/925,500
Amdt. dated 27 September 2004
Reply to Office Action of 27 May 2004

566.40490X00/HT 169301
Page 16

With regard to Norimitsu, each of the plurality of base stations of Norimitsu obtains a value of distance function from a mobile station by detecting up signals of the mobile station by a receiver of each base station, and the obtained value is transmitted to a base station controller. The base station controller calculates transmission timing difference between the reference base station and a base station which becomes an object for change of transmission timing based on data from the base station concerned, and transmits the calculated difference to base stations other than the reference base station to change transmission timing of a down signal (Column 2, lines 12-55, Fig. 4).

In contrast, the present invention corrects the reference value of the reception signal level necessary for controlling a hand over with the correction value and controls the hand over based on the corrected reference value of the reception signal level and the reception signal level of the perch channel signal associated with the hand over source cell (or source sector) and hand over destination candidate cell (or destination sector). Thus, the present invention has different structure from Norimitsu.

The present invention can achieve an advantageous effect that a more reliable hand over is performed even when the range of cells or sector is different from the actual communicable range. Such effect cannot be obtained from the Invention of Norimitsu.

As explained above, the references do not describe any of the object, construction, and/or effect of the present invention, and therefore the present Invention cannot be rejected over these references under 35 USC §§102 or 103.

MASUDA et al., Appl'n No. 09/925,500
Amdt. dated 27 September 2004
Reply to Office Action of 27 May 2004

566.40490X00/HT 169301
Page 17

As a result of all of the foregoing, it is respectfully submitted that the applied art would not support a §102 anticipatory-type rejection or §103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such §102 and §103 rejections, and express written allowance of all of the rejected claims, are respectfully requested.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

EXAMINER INVITED TO TELEPHONE

The Examiner is invited to telephone the undersigned at the local D.C. area number of 703-312-6600, to discuss an Examiner's Amendment or other suggested action for accelerating prosecution and moving the present application to allowance.

MASUDA et al., Appl'n No. 09/925,500
Amdt. dated 27 September 2004
Reply to Office Action of 27 May 2004

566.40490X00/HT 169301

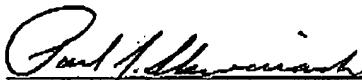
Page 18

CONCLUSION

In view of all of the foregoing, it is respectfully submitted that all of the claims presently pending in the subject application are in condition for allowance, and an early Notice to that effect is respectfully requested.

A Petition for an extension of the shortened statutory period for response set by the 27 May 2004 Office Action is attached. To whatever other extent is actually necessary and appropriate, Applicant respectfully petitions for an extension of time. Also attached is a Form PTO-2038 authorizing payment of requisite Petition fee. Please charge any actual required deficiency in fees for entry of this paper to ATSK Deposit Account No. 01-2135 (as Case No. 566.40490X00).

Respectfully submitted,



Paul J. Skwierawski
Registration No. 32,173
ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 North Seventeenth Street, Suite 1800
Arlington, Virginia 22209-3801, USA
Telephone 703-312-6636
Facsimile 703-312-6666

Attachments:

Petition for Extension of Time
Form PTO-2038 (Fee Code 1251)